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THE ROYAL AUSTRALIAN NAVY
OFFICER RETENTION SURVEY

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The effects of Career Stage and Location
upon Serving Officer Attitudes

Part 1

The Jans Three Stage Model

by

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Abstract

Using a serving Navy officer sample an attempt was made to reproduce the results of previous research into the attitudes of male officers from all three Services. The main independent variables were career stage and serving location. (Canberra vs elsewhere)

Present results confirmed the claim that Canberra serving officers report lower job and job-related satisfaction and generally lower morale than their counterparts serving elsewhere.

However present results also suggested that the main focus of these effects occurred in Late career (20 years +) instead of Middle career (14 to 19 years) as claimed in the previous research.

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INTRODUCTION

In this note are presented data on the behaviour of a number of attitudinal constructs including some which were first studied in an Australian Defence Force setting by Jans (1985). *

Two in particular were identified. One was "career motivation", the desire or propensity to continue serving and to maintain contact with the organisation. The other was "career involvement", the degree to which an officer is committed to his service career by feelings of duty, obligation and other ties. This is termed "career commitment" in the Retention Study, (Salas, 1988a).

Jans argues that, by the Middle stage of his service career (14-19 years), the challenge and excitement of a male service officer's involvement in his chosen military speciality inevitably gives way, through the programmed demands of career development, to a duller, relatively unfocussed office-bound future, with negative effects on his motivation to continue serving and on his career involvement.

Jans (1987,* p.6) supports his argument with statistics claimed to show that both career motivation and career commitment are "particularly low" in Mid-career when compared with the Early career stage for male officers of all three Australian Services. The effect was heightened if the Mid-career stage were being served in Canberra at the time of his survey and the overall phenomenon is currently referred to as the "Mid-career crisis".

AIM

To examine the results of the response patterns made by about 1400 male, Royal Australian Navy officers during the course of the recent Navy Officer Retention Survey (Salas, op.cit.) to measures of a number of constructs and, in particular, those of career motivation and career commitment.

The ultimate aim is to establish if whether a mid-career crisis is discernible within this sample of Naval Officers and whether the "Russell Rogey"# contributes to it.

* See technical notes.

Defence Central is located in Russell Offices, Canberra. (Jans 1985)

METHOD

Results should be generated by:

- (i) measuring career motivation over early, middle and late officer career stages;
- (ii) measuring career commitment over the same career stages;
- (iii) studying the effect of serving location (Canberra vs non-Canberra) on scores on the career motivation and career commitment scales;
- (iv) studying the combined effects of location and career stage upon scores on career motivation and career commitment scales;
- (v) comparing the results of (i) to (iv) with those published by Jans (1987);
- (vi) studying the results from other scales generated from the Retention Survey Questionnaire using the same independent variables.

BRIEF DESCRIPTION OF THE SCALES

As noted above, the Career Motivation Scale (CMS) measures the extent of the desire to continue serving.

The scale comprises the following items from the Retention Survey Questionnaire. The Section and item number follow in parentheses.

- 1. At present how actively are you considering resignation? (S3Q2)
- 2. Please give an estimated time-frame in which your contemplated resignation is most likely to be implemented. (S3Q3)

3. At present, how certain do you feel that you could get satisfactory employment in civilian life without much trouble? (S3Q8)
4. Have you actively initiated enquiries about one or more employment prospects outside the Service over the past 2 years? (S3Q9)
5. How many of these enquiries were related to your Navy employment? (S3Q10)

N.B. For this scale, the items were keyed so that a high score indicated a low level of motivation to continue serving and vice-versa. This should be remembered when interpreting Tabled data.

The CMS proved to be unifactorial with a reliability coefficient (alpha) of 0.71. This is a satisfactory result and one which could probably be improved upon. All items were generated by the present writer.

The Jans Career Motivation Scale

The Jans Career motivation Scale comprises three items, one drawn from a recognized Scale of Occupational Commitment (OCS Mowday R.T, Porter, L.W. & Steers, R.M. 1982) and two from other, unspecified studies as follows:

How much longer do you think you will remain in the service?

How often these days do you consider resigning from the service?

It would take very little change in my present circumstances to cause me to resign from the service (agree/disagree).

The alpha coefficient for this three-item array was 0.83. The conceptual similarity of these three scale items to those in the preceding CMS Scale is apparent. In spite of the content variations, it appears likely that both these versions of a Career Motivation scale measure along the same dimension even if they may not be equivalent.

The Jans Career Involvement Scale

The 8-item CI Scale (Jans, 1985) embodies four items from the OCS (Mowday et al, op cit).

This fact plus the content of the other four items suggested to the present writer that the CI Scale was measuring the wider construct of occupational commitment. In fact, Jans (1987) alternatively terms it "career commitment" and more recently he endorsed the present writer's opinion regarding the basic identity of the "Career Involvement Scale" as representing commitment to the organization.*

The CI Scale items are listed below:

"Most of my interests nowadays are concerned with the things outside the Service".

"I find that my values and my Service's values are often out of step".

"In general, how do you feel with life in the Services?"
(1 = very dissatisfied, 7 = very satisfied).

"There's not much to be gained by staying in the Services indefinitely".

"Often I find it difficult to agree with my Service's policies on important matters".

"I would feel happier in a different career than the Service"

"My Service career plays only a small part in my ideas about my working future".

"I am very much personally involved in my career as a Navy/Army/Air Force Officer".

Coefficient alpha for this scale was 0.83.

The following six items were included in the Retention Survey Questionnaire with the aim of measuring officer commitment to a Naval career. They provide a counterpart to the Jans Career Involvement Scale.

* Private correspondence.

Commitment Scale items - Retention Survey (Section 4)

At present, how committed do you feel to the idea of a Navy career? (11)

How satisfied are you with your Navy career to date? (12)

How satisfied are you that you chose to join the Navy over the other careers available? (13)

I find that my values and Navy values very similar (14)

Navy membership has a great deal of personal meaning for me (15)

How strong is your sense of obligation to the Navy? (16)

This scale is unifactorial with a coefficient alpha of .84.

The Commitment Scale (CS)

The above instrument was constructed to test the role of organizational commitment amongst RAN officers. A description of the construct is covered in Mowday et al, op cit). Broadly speaking, commitment describes the proclivity possessed by a member of an organization by which he identifies with the organization to the extent that he views the goals and aims of the organization as HIS goals and aims, its values as HIS values and, figuratively speaking, its existence HIS existence. Associated with these feelings are a desire to continue to maintain contact with the organization, to work for its enhancement and to repudiate membership of other organizations.

The first three items were generated by the present writer. The "careers available" item was designed to substantiate the choice for a Navy career over alternatives. The "career to date" item establishes a direct link between the satisfaction and the commitment constructs.

The "values" item is modified from the Organizational Commitment Questionnaire (OCL; Mowday, et al. 1982). The "personal meaning" item was designed to allow for the expression of broader emotional feelings, (affective commitment) whilst the "obligation" item gives expression to the feeling that one "ought" to remain serving as a duty, out of allegiance or loyalty.

The Affective Commitment (K) Scale comprises the following items from the Retention Questionnaire.

1. How do you feel about making the Navy your career? (S4Q4)
2. I find that my values and Navy values are very similar. (S4Q14)
3. Navy membership has a great deal of personal meaning for me. (S4Q15)
4. How strong is your sense of obligation to the Navy? (S4Q16)

The K. Scale is unifactorial and has an alpha coefficient of .81.

Jans (1985) refers to Career Involvement (commitment) as representing the affective (feeling, emotional) aspect of his Career Adjustment construct.

The K Scale purports to isolate this component of commitment in the present analysis.

Commitment/"Career Involvement"

A perusal of the present Commitment Scale (CS) and the Career Involvement (CI) scale of Jans outlined earlier suggests that almost identical components of Commitment are being measured in each case, albeit somewhat more obliquely in Jans' scale.

It may be concluded that lack of a demonstrated one-to-one equivalence between the two Career Motivation scales described above and between the two Commitment scales does not preclude a degree of legitimate comparison being made between the results of the Jans (1985) work and those of the present study, with respect to the behaviour of these two constructs across comparable samples.

COMMITMENT - IDENTIFICATION - SATISFACTION

Organizational commitment is a construct which seems co-dimensional with another, older one, that of identification with the organization. In fact, in Mowday et al. (op cit 1982) the two terms are sometimes used interchangeably.

In a Defence Force, with its characteristic all-embracing responsibility for most significant aspects of a member's life and welfare, the concept of individual commitment (or identification) seems especially pertinent when evaluating retention/turnover/attrition and attempts at their prediction. This supposition appears strengthened by contemplating, for one, the longer training and more intense indoctrination period characteristic of military employment conditions compared with those aspects of employment in most civilian organizations.

Identification (commitment) has been shown to be associated with assimilation to the Army (Salas, 1967a) and assimilation status has in turn been significantly linked to retention over a three-year term.*

In the model used in that study, (ibid) the thesis that a certain prior level of satisfaction with other-rank Army life was a prerequisite of attaining a measure of identification (commitment) with the organization, was supported.

In the present study of Navy officer retention, both the satisfaction and commitment (identification) constructs were found to be very highly significantly correlated.

The Satisfaction Scale Questionnaire (SQ) has no counterpart in the Jans (1985) study but three of its items find a place in the 9 item Resignation Propensity (RP) scale. The RP Scale, the conceptual reverse of the Career Motivation scale, has been found to be a valid predictor of RAN male, officer resignation activity, (Salas, 1988b).

THE SATISFACTION SCALE QUESTIONNAIRE (SQ)

A ten-item adaptation of a scale of satisfaction with Army life (Salas, 1967b) was included in the Retention Survey.

* unpublished follow-up study of results in Salas (1967a).

The SQ is a well documented scale, the results of which have been shown to be implicated in the separation and the re-engagement decisions of other-rank personnel, (Salas, 1984).

The SQ items used in the Retention Study are listed below:

1. How well do you think the Navy is run?
Very well 7 6 5 4 3 2 1 Very badly
2. What sort of chance does the Navy give you to show what you can do?
A very good chance 7 6 5 4 3 2 1 A very poor chance
3. In general, how do you feel about life in the Navy?
Very satisfied 7 6 5 4 3 2 1 Very dissatisfied
4. How do you feel about making the Navy your career?
Very keen to 7 6 5 4 3 2 1 Don't want to
5. How do you feel about your chances of promotion in the Navy?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
6. Do you feel in general that you are doing better in the Navy than you could in civilian life?
Very much better 7 6 5 4 3 2 1 Very much worse
7. Do you think you have improved and bettered yourself by being in the Navy?
Very much so 7 6 5 4 3 2 1 Not at all
8. How satisfied are you with your Navy pay?
Very satisfied 7 6 5 4 3 2 1 Very dissatisfied
9. How satisfied do you feel with your current Navy job?
Very satisfied 7 6 5 4 3 2 1 Very dissatisfied
10. Men and women coming into the Navy expect things from their future Navy life. How well would you say that your expectations have been met?
Much better than expected 7 6 5 4 3 2 1 Much worse than expected

The present version of the SQ does not cover the possible universe of content. Satisfaction with supervision is one important omission. Intention to re-engage, a potent item in reflecting general satisfaction in the other-rank version of the SQ, was excluded as being inappropriate in the officer setting.

Items 1, 2 and 3 of the Resignation Propensity Scale are from the SQ (promotion, doing better in Navy, Navy career). These all loaded on the "career" factor of the RP Scale, (Salas, 1988).

SQ item 3 ("In general, how do you feel about life in the Service?"), also appears in the Jans Career Motivation Scale. This item first saw the light of day in Australia as part of the Satisfaction Scale Questionnaire (Salas, 1967a). It originally appeared in "The American Soldier" (Stauffer, et al. 1949) as part of a Guttman scale of satisfaction with Army life.

The SQ has 2 factors with an alpha coefficient of .82. With item 8 (pay) removed the SQ becomes unifactorial.

OTHER SCALES

Scales which measure constructs common to both the Jans' (1985) research and that of the Navy Officer Retention Survey are described below and some results are compared. Some others described do not appear in Jans (ibid).

The most important of these scales in the present context would be the Resignation Propensity (RP) Scale and the SQ.

RP Scale results were not available for use in the first part of the present study but they do feature elsewhere.

The Resignation Propensity Scale (RP)

This is described at length in Salas (1988a, b). It is a nine item measure, scores on which provide an index of an officer's tendency towards voluntary separation from the Navy.

RP Scale

Instruction: You are invited to answer some or all of the questions below, if you wish.

1. How do you feel about your chances of promotion in the Navy?
Satisfied 7 6 5 4 3 2 1 Dissatisfied
2. Do you feel in general that you are doing better in the Navy than you could in civilian life?
Very much better 7 6 5 4 3 2 1 Very much worse
3. How do you feel about making the Navy your career?
Very keen to 7 6 5 4 3 2 1 Don't want to
4. At present, how committed do you feel to the idea of a Navy career?
Very committed 7 6 5 4 3 2 1 Not committed at all
5. How attractive does the idea of career employment in civilian life appear to you at present?
Very attractive 7 6 5 4 3 2 1 Very unattractive
6. Have you had one or more job offers from organizations or individuals outside the Service over the past 2 years?
No.....1
One.....2
2 or 3.....3
7. Have you actively initiated enquiries about one or more employment prospects outside the Service over the past two years?
No.....1
Yes, one.....2
Yes, 2 or 3.....3
Yes, more than 3.....4
8. Have you ever considered resigning?
Yes.....1
No.....2

9. If you answered Yes to the above item 8, please give an estimated time frame in which your contemplated resigning is most likely to be implemented.

0-2 mths.....1	3-6 mths.....2	7-12 mths.....3
13-18.....4	19-30 mths.....5	30 + mths.....6
Not Applicable...7		

Three factors were identified in the RP Scale. It has an alpha coefficient of .72.

The Job Satisfaction Scale (JOBSAT)

This measure comprised the following items, all from Section 4 of the Retention Survey Questionnaire.

What sort of chance does the Navy give you to show what you can do?
(S4 item 2)

In general, how do you feel about life in the Navy? (S4 item 3;
This item also appears in Jans' Career Motivation Scale).

How do you feel about your current Navy Job? (S4 item 9).

At present, how committed do you feel to the idea of a Navy career?
(Commitment Scale, CS) (S4 item 11)

How satisfied are you with your Navy career to date?
(Commitment Scale, CS) (S4 item 13)

The JOB SAT Scale is unifactorial with an alpha coefficient of 0.79.

The Service Effectiveness (SE) Scale

This measures attitudes towards the efficiency of the Navy as an employer. It includes opinions about career management.

SE scale items are as follows: (The origin of each item is given in parentheses.)

How well do you think the Navy is run? (S4 item 1)

What sort of chance does the Navy give you to show what you can do?
(S4 item 2)

In general, how satisfied do you feel with Navy life? (S4 item 3)

How satisfied are you with the current RAN Officer Personal Reporting System? (Section 2, item 8)

How satisfied are you with the quality of RAN Personnel Management (including Officer Career Planning)? (Section 2, item 9)

How effective do you think is the dream sheet system? (Section 2, item 10)

The SE Scale is unifactorial with a coefficient alpha of 0.79.

The Remuneration Scale (RS)

This instrument scales attitudes towards service and civilian pay and the financial costs of being a member of the Navy. The RS is made up of the following items: (Origins of items are given in parentheses.)

How satisfied are you with your Navy pay? (S4 item 8)

How does your Navy pay (+ allowances, benefits etc.) compare with the money you think you could expect to receive in civilian life?
(Section 5, item 15)

Financial costs of being in RAN (e.g. removals) - (as a resignation influence; Section 5, item 17)

The RS Scale is unifactorial and has a coefficient alpha of 0.65.

The Family Factor Scale (FF)

This measures the degree to which the influence of family matters might contribute to an officer's decision to resign. They come from Section 5 of the Retention Survey Questionnaire and are as follows:

Effects of posting turbulence on marital harmony.

Effects of posting turbulence on childrens' education (if applicable).

Spouses's attitude towards RAN service.

A high score indicates a heightened sensitivity to those influences.

This scale proved to be unifactorial with a coefficient alpha of 0.65.

PART 1 LOCATION EFFECTS

Location effects (Canberra vs non-Canberra) were tested for:

METHOD

There were 403 useable cases in the Canberra group and 908 in the non-Canberra group. Mean scores were obtained for each group on the following scales:

Scale	Acronym
Satisfaction with the Navy	SQ
Commitment	CS
Career Motivation	CMS
Family Factor	FF
Job Satisfaction	JOBSAT
Remuneration	RS
K. Scale (Affective Commitment)	KS
Service Effectiveness	SE

These means were compared and differences tested for significance using the t statistic.

RESULTS AND CONCLUSIONS

No substantial differences were found between the mean scores on the above 8 scales when the Canberra and the non-Canberra serving groups were compared.

It was concluded that the sole fact of serving in Canberra did not appear to affect officer attitudes in a number of key attitudinal areas including career motivation and career involvement (commitment).

There was, however, a tendency, at a low level of statistical significance (0.08%) for the general level of satisfaction with Navy life, as measured by SQ scores, to be lower in Canberra when compared with those elsewhere. As far as career motivation, commitment to Navy of any variety, job satisfaction, the family factor, attitudes towards Service effectiveness and towards remuneration were concerned service in Canberra appears to have exerted no discernible effect across the total sample.

The Location Effect - A Further Analysis

Because of Jans' (1985) insistence upon the existence of a negative effect of service in Canberra upon important officer attitudes, it was decided to study the Navy Retention Survey in finer detail with the aim of identifying data likely to be supportive of Jans' claim. These may not have been strong enough to make their presence felt in the previous analysis where scales compared clusters of items. We now turn to the individual questionnaire items themselves.

Method

Mean questionnaire item scores were resorted to where feasible, using the t statistic to establish the significance of the differences.

Results

These are presented in Table 1 below. The notation is based on the levels of significance found for the size of t obtained by comparing mean item scores.

Questionnaire items omitted failed to discriminate between the two location groups.

TABLE I

Retention Survey questionnaire items which discriminated between the two locations.

Questionnaire items		Location	
Section I	Canberra	t	non-Canberra
Rank	very much higher *	10.61	-
Academic quals	-	1.95	a little higher
Married	many more	3.42	-
Money lost	much more lost	5.19	-
Have own home	-	6.11	very many more
Section II			
Job Frustrations	more	2.58	-
Mid-career education	many more want	4.77	-
Trained for job?	many more say not	5.89	-
Estimated civ. esteem	less	2.18	-
Section III			
Past Resignation thoughts	more	2.2	-
Wife working?	many more	5.01	-
Section IV			
Promotion chances?	more dissatisfied	2.65	-
Improved self in Navy?	a little less	1.94	-
Job satisfaction	less	3.16	-
Resignation Influences	Canberra	t	non-Canberra
Posting & spouses education		2.40	more influence
Posting & marital harmony		2.63	more influence
DFRDB uncertainties	a little more	1.90	
No more contribution to make	more	2.04	
Higher income outside		2.68	more
Dissatisfaction with RAN housing			more

* read as "proportionately" in all cases.

COMMENT

Jans (1987) claims that there are a number of reasons for problems existing in the Department of Defence, Canberra with job dissatisfaction and family factors providing the main basis for these. Higher military rank is concentrated in Canberra. This tends to devalue the currency so that, quote, "colonels (or equivalents)... feel they have no more influence on events than do the majors..." unquote. Decision making powers tend to drift higher up the hierarchy than is perhaps customary outside of Canberra. This, says Jans, leads incumbents to feel that they have less influence on events associated with their jobs, lessening in turn "chances of effort leading to accomplishment" (ibid.p.9).

Another problem cited for officers, characteristic of their service in Canberra is a feeling of lack of competence due, possibly, to lack of training for office-bound, administrative types of jobs. Jans adds that excessively high rates of job rotation tend to prevent officers ever fully finding their feet, job-wise, in Canberra.

From the Table 1 data, a much higher proportion of Canberra located RAN officers do tend to report themselves either partially or totally untrained for their present jobs compared with those RAN officers serving in other locations ($t = 5.89$). These latter also appear more satisfied with their Navy jobs than those serving in Canberra ($t = 3.16$). Canberra based officers also report a significantly higher frequency of frustration "at the lack of decision making opportunities" for their rank levels ($t = 2.58$). In terms of likely resignation influences, Canberra serving officers tend to believe to a greater extent that they have little more to contribute to the RAN than do their counterparts serving elsewhere ($t = 2.04$). They are less satisfied with their promotion chances ($t = 2.65$) and tend to feel less satisfied with their self-improvement ($t = 1.94$) than are their counterparts serving elsewhere. A number of the significant results appearing in Table 1 are very likely due to the confounding effect of age/rank/length of service i.e. the proportion of higher ranking officers serving in Canberra is much greater than that serving in other areas ($t = 10.61$).

This more or less specific job-centred dissatisfaction is a result supporting those of Jans (1985) but it does not appear to be accompanied by shifts in more fundamental attitudes towards the Service. The general level of satisfaction with Navy life was equivalent for both groups and no diminution of career motivation or career commitment was evident amongst Canberra serving officers.

It is beyond argument that trained service officers are more content in the pursuit of their military employment specialty than they are doing other things. Any non-operational job, wherever located, is bound to be less satisfying, per se, than an operational job, especially to those specifically trained for this role.

Part of military folklore is the disenchantment and deflation experienced by officers following upon their ultimate posting from driving/flying a craft to driving/flying a desk.

As Jans observes in this vein, "When an officer whose speciality is combat moves from an operational unit to work which is markedly different, it may be expected that he will experience some disorientation and perhaps depression, at least during his "settling-in period", (ibid.p.88).

In Canberra is to be found the largest population of Australian military officers occupying administrative, non-operational types of jobs. Small wonder perhaps that average job satisfaction measured amongst these is significantly at variance with that measured amongst the rest of the serving officer population.

Summary

It is concluded that as far as the total sample of Naval officers in the Retention survey are concerned, whilst there may be lower levels of job satisfaction amongst those serving at Defence Central as Jans (1985) claimed the dissatisfaction appears to be confined almost solely to that aspect of service.

On the present evidence Canberra located officers show no greater loss of commitment or career motivation than do their counterparts serving elsewhere.

Part 11

Length of Service. The effect of Career Stage.

METHOD

Male respondents to the Retention Survey were separated into career stages according to periods identified by Jans, (1988), p. 121).

Length of Service	Career Stage	n
0 - 13 years	Early	678
14 - 19 years	Middle	358
20 +	Late	391

Procedure

Mean scores on the scales described above were compared between career stage groups and the differences tested for statistical significance using the t statistic.

Results

Table 2 below presents the sizes of t and associated levels of statistical significance when mean scale scores are compared for each stage.

The first column presents the results of comparing Early and Middle career stage mean scores, the second column the results of comparing Early and Late career stage groups and the third column shows the results of Middle and Late career stage comparisons.

Table 2
Retention Survey

Results of Comparisons of mean scale scores across Early, Middle and Late Career Stages: Male RAN Officers.

Scale	Early vs Middle	Early vs Late	Middle vs Late
	(n = 678)	(n = 358)	(n = 391)
	t (p)*	t (p)*	t (p)*
Navy Satisfaction (SQ)	-	-	-2.78 (.006)
Career Motivation \emptyset	-	+9.18 (.000)	+7.49 (.000)
Commitment	-	-5.67 (.000)	-3.29 (.001)
Family Factor	-8.24 (.000)	-8.83 (.000)	-
Job Satisfaction	-2.11 (.003)	-5.00 (.000)	-
Service Effectiveness	-	-3.421 (.000)	-2.61 (.001)
Remuneration	-	-	-
K. Scale	-	-2.95 (.003)	-

* with a significance level for p set at 0.005 there is less than 0.01 percent probability that a type 1 error exists in these three-way comparisons.

($p = 1 - (1 - \alpha)^C$ Where C = no of comparisons).

\emptyset CM Scale scores are negatively keyed. Higher CMS scores = Lower CM.

COMMENT

SATISFACTION WITH NAVAL LIFE (SQ)

There appear to be no differential mean scores of statistical significance between officers serving in the Early, Middle and Late career stages. There was a tendency ($p = .006$) for officers in their Late career stages to be more satisfied with Naval life than are those in the Middle career stage. Since the significance level falls just outside that chosen for the present analysis to minimize the incidence of type 1 errors (0.005), the difference in mean SQ scores across these two stages may be due to chance (although there are only about two chances in 100 that this is so).

"THE MORE IMPORTANT QUESTION IS WHY THE CAREER MOTIVATION AND CAREER INVOLVEMENT SCORES OF OFFICERS IN MIDDLE CAREER ARE LOWER THAN THOSE IN EARLY CAREER OFFICERS", JANS, 1988, p.122).

CAREER MOTIVATION (CMS)

No significance is seen in the difference between mean CMS scores in Early career and Middle career in Table 2. This result does not support Jans' thesis of "lower" CMS scores being characteristic of the Middle career stage, an event involved in the "Mid career crisis".

COMMITMENT (CS) ("Career Involvement")

The pattern of mean score differentials is similar here to the CMS pattern, i.e. there is no significant difference between mean Early and Middle career scores on the Commitment scale, a result which, again, is not congruent with Jans' findings.

"TWO FACTORS WHICH DO NOT CHANGE SIGNIFICANTLY OVER CAREER STAGES ARE JOB SATISFACTION AND SERVICE EFFECTIVENESS".... however..... "JOB SATISFACTION SEEMS HIGHEST IN THE MIDDLE CAREER STAGE" (JANS, 1988,p.123).

JOB SATISFACTION

The Table 2 data indicate that there is no significant difference between Middle and Late career stages in terms of mean job satisfaction scores. Mean scores on this scale, however, are significantly lower in Early career than in either of the two subsequent career stages. These results fail to support Jans' findings.

SERVICE EFFECTIVENESS

The favourableness of perceptions of the Navy as an effective and efficient employing organization appears much the same amongst those in Early and Middle career stages.

However, as with Commitment scores, officers serving in their Late Career stage have significantly more favourable perceptions than those serving in either of the two preceding career stages, another result which does not support Jans' findings.

FAMILY FACTOR

This scale measures the degree to which certain important variables might be perceived as factors of influence in officer resignation (turbulence and marital harmony, turbulence and childrens' education and spouses' attitude to Navy service).

In each case Middle and late career stage officers score higher than those in their Early career stage.

K SCALE (KS. EMOTIONAL COMMITMENT)

As with the original Commitment scale those in their late career stage scored significantly higher than those in the Early career stage, although no difference of any significance was evident in KS scores between any other two stages.

The Remuneration scale showed no mean score differentials across career stages.

Summary

Results from this sample of male RAN officers show little support for the proposition that a mid career crisis exist. (Table 2)

Along with higher job satisfaction levels, commitment to the Navy and favourable opinions of the Navy as an employer are highest in the Late career stage. On the other hand it is at this stage that career motivation is at its lowest. Mean satisfaction levels with Navy life appear likely to be higher in the Late career stage.

Conclusions

The results of the present analysis by career stage do not suggest that a mid-career crisis exists (defined by a drop in both commitment to the Navy and in career motivation in the Middle career stage) within the total sample of male RAN officers.

However the results do show a rise in mean job satisfaction level in Middle career followed by an even greater rise in Late career.

Family factors as resignation influences are also lowest in Early career.

Review of results to Date

Two separate analyses of the Retention Survey data have now been presented, one by location and the other by career stage.

Results of the location analysis indicated that, for the total sample, scores on job satisfaction and associated job factors tended to be lower amongst officers serving in Canberra (Defence Central) when compared with those serving elsewhere. To this extent the Russell Bogey (Canberra effect) appears to be confirmed.

The analysis by career stages showed an increase in job satisfaction with length of service across Early, Middle and late career stages. No diminution of career motivation or commitment to the Navy was shown to exist between Early and Middle career stages. Service effectiveness scores were significantly higher in Late career. In general the results of the present analysis do not support Jans (1985) findings.

The next analysis will examine the interactive effects of location and career stage, when taken together, upon scores on the various scales used above.

This final analysis will be critical for it is amongst officers in Middle career who are serving in Canberra that Jans claims a career crisis to be most likely, (Jans 1988, p.200).

PART 111

Method

Differences between mean scores on various scales and items were compared for statistical significance using the statistic *t*. Results are discussed with respect to those of Jans (1986) and others.

Procedure

The total sample of serving male officers from the RAN officer Retention Survey was divided into three career stage groups as follows, according to the logic of Jans (1988, p. 121).

Group	Length of Service	Career Stage
1	0 to 13 years	Early
2	14 to 19 years	Middle
3	20 + years	Late

Each of these groups was subdivided on the basis of their location at the time of the Retention Survey, i.e. either Canberra or elsewhere.

Mean score differences on various scales and questionnaire items were compared for statistical significance, between locations within each career stage group.

Background

Because of Jans' conclusions that the Middle career years (14 to 19) represent a period of unique significance in a Service officer's career, the initial focus of interest in the present results lies there.

Presented below is a modified version of Jans, 1985 p.22, table 5.1. These results serve as a reference point for the results of the present analysis.

Table A
Service Officers in Middle Career
(from Jans, 1987)

Scale	Canberra Mean Score	n 103	non Canberra Mean Score	n 270	t	Significance
						.01
Career Commitment	3.98		4.33		2.81	.01
Career Motivation	4.03		4.32		2.31	.001
Service Effectiveness	3.85		4.01		-	NS
Career Prospects	3.81		4.15		2.92	.01
Job Satisfaction	4.26		4.88		4.18	.001
Achieving Results*	4.44		5.07		3.26	.001
Decision participation*	4.49		5.30		4.82	.001
Job Effort Ø	5.23		5.82		4.13	.001
Job Performance Ø	5.19		5.51		3.09	.01
Trained for present job	4.69		5.32		3.38	.001

Ø no equivalent in present study

* see Technical Note 2

The results above indicate that in all variables bar one, (Service Effectiveness) Middle career Service officers serving in Canberra at the time of Jans' data gathering (1984) were negative compared to results from Middle career officers serving elsewhere at that time.

When these findings were supplemented by interview data and anecdotal evidence a fairly good case emerged for the existence of a Canberra - effect amongst that sub-sample of Middle career officers.

Additionally, since Late career stage officers serving in Canberra showed no evidence of such an effect in their scoring patterns on the same array of variables, when compared with their counterparts serving elsewhere, the case for the existence of a Middle-career crisis became more persuasive.

No comparable data on Early career stage officers were tabled by Jans in this format.

Retention Survey

Table 3

Scale and item mean scores by location and career stage. RAN male officers.

Group 2 Middle Career
(14 to 19 years service)

Scale	Canberra Mean Score	n 78	non-Canberra Mean Score	n 148	t	significance
Navy Satisfaction (SQ#)	43.3		43.9		0.46	NS
Career Commitment (CS)	29.4		29.7		0.34	NS
Career Motivation (CMS)	10.5		10.2		0.55	NS
Family Factor (FF)	9.2		9.7		1.12	NS
Job Satisfaction (JOBSAT ^o)	23.3		23.8		0.50	NS
Service Effectiveness (SE)	22.9		22.8		0.01	NS
Remuneration	13.8		13.0		1.44	NS
Emotional Commitment KS#	19.3		19.7		0.60	NS
Resignation Propensity #	26.7		26.7		0.02	NS
Items*						
Substantive rank	3.3		2.9		3.47	.001
Trained for present job	2.9		3.2		3.05	.003
Frustrations with N.org#	3.1		3.2		0.49	NS
Decision participation	2.6		2.3		2.14	.03
Sat. with Navy job#	4.8		5.2		2.73	.001
Achieving results	4.5		4.5		0.11	NS
Age	36.6		35.7		1.41	NS

No counterpart in Jans (1985) study

* See Technical note 2

o See Technical note 3

COMMENT

Comparing results from Table A with those from Table 3 indicates minimum support for the "Canberra effect" which purports to find a focus in the Middle career of Service officers.

None of the specially constructed scales produced mean scores which differed significantly between officers serving in either of the two locations and only a few of the 90 or so questionnaire items tested showed mean score differentials which might show Canberra-serving Middle career officers to be unique, and only three of those were germane to the present argument, as follows:

Lack of decision participation,	$t = 2.14, p = .03$
Not trained for present job,	$t = 3.05, p = .003$
Dissatisfied with Navy job,	$t = 2.73, p = .001$

These three items relate to the job scene. Response patterns show that Canberra-serving officers in mid Career are more frustrated than officers serving elsewhere at the lack of their opportunities for participating in decision making, feel comparatively untrained for their present jobs and are less satisfied with their Navy jobs than are officers serving in places other than Canberra.

These results do support Jans' claims regarding the "Russell Bogey" and its effect upon officers serving in Middle career.

However, judging by the lack of any significant mean differences on scores on such variables as commitment to the Navy, career motivation, overall satisfaction with Naval life (SQ) and in particular resignation propensity between Middle career officers serving in Canberra and those serving elsewhere, the comparative and specific job disenchantment of those located in Canberra does not appear to have spilt over, or generalized, into other areas purported to be important to officer career adjustment.

As far as these important career variables seem concerned, job dissatisfaction defines the limits of any Canberra mid-career crisis.

Conclusions

It can be concluded that in the main, the present sample of serving Navy officers does not exhibit the same response patterns as did the sample of RAN, Army and RAAF officers addressed by Jans (1985) to measures of constructs which, whilst not identical to those defined by Jans' questionnaire items, provided output which can be claimed to be at least in the same conceptual ballpark.

Sample size and composition may provide some explanation of the lack of congruence between the present results and those of Jans.

The size of the latter's Middle career, Canberra subsample was 103. Of this, if all three Services were equally represented, the size of the Navy subsample would have been about 34. Such a cell frequency is a little low as a basis from which to draw reliable conclusions with respect to the Navy (Table A)

The equivalent Navy subsample in the present study was 78 and even this is still not all that large when one appreciates the weight of the conclusions which it is being asked to support.

Initially then, it can be concluded that the lack of congruence between the results of the Jans' (1985) study and the present one could be due to sampling constraints, it could be due to the inequivalence of the measuring instruments or it could be due to a combination of both. For whatever reason, however, Jans' assertions in this area are only partially supported by the present results.

Consideration of the response patterns of officers in Late career stage may enable further conclusions to be made. Jans' results on Late career officers are given in the following table, modified from Jans (1988) Table 5.1.p.200. Jans comments are as follows:

"Late stage officers, do not differ significantly in their scores on many variables when they are divided into Defence and non-Defence* groups. However, on certain factors, Late stage officers at Defence score similarly to their more junior colleagues, in that their job effort is less, their job performance is less and their professional preparation was not as adequate, when compared with their peers elsewhere." (1988, p.201).

* Canberra vs non-Canberra

Table B

Service Officers in Late Career
(modified from Jans, 1985)

Scale	Canberra (n=104)	non-Canberra (n=180)	t	Significance
Career Commitment	4.37	4.47	-	NS
Career Motivation	3.60	3.61	-	NS
Service Effectiveness	3.99	4.11	-	NS
Career Prospects	4.16	4.14	-	NS
Job Satisfaction	4.48	4.17	-	NS
Achieving Results	4.86	5.17	-	NS
Decision participation	5.11	5.26	-	NS
Job Effort *	5.48	5.83	2.38	.001
Job Performance *	5.22	5.51	2.36	.001
Trained for present job	4.55	5.37	4.01	.001

* no counterpart in the present study.

Table 4

Retention Survey

Scale and item mean scores by
location and career stage.

group 3 late Career
20+ years service
RAN male officers

Scale	Canberra Mean Score	n 155	non-Canberra Mean Score	n 193	t	significance
Navy Satisfaction (SQ)	43.8		46.5		-2.77	.006
Career Commitment (CS)	30.3		31.4		-1.62	NS
Career Motivation (CMS)	12.7		13.0		-0.50	NS
Family Factor (FF)	8.6		9.2		-1.69	NS
Job Satisfaction (JOBSAT)	23.5		25.1		-2.85	.005
Service Effectiveness (SE)	23.6		24.4		-1.18	NS
Remuneration (RS)	14.3		13.9		0.85	NS
Emotional commit. (KS)	19.8		20.8		-1.98	.049
Resignation propensity (RP)	27.9		27.6		0.39	NS
Item						
Substantive rank	3.79		3.2		5.95	.000
Trained for present job	2.9		3.2		-3.32	.001
Frustrations with N.org.	3.3		3.0		2.69	.001
Decision participation	2.6		2.4		2.50	.01
Satisfaction with N.job	4.8		5.6		4.45	.001
Achieving results	4.5		4.8		-1.73	NS
Age	41.4		40.4		1.82	NS
Significance of Navy						
Membership	5.0		5.4		2.26	.02
General sat'Navy life	4.5		4.8		-2.21	.02
Marital harmony	3.1		3.4		-2.17	.03
Childrens' education	3.3		3.7		-2.50	.007

As far as the data from the Scales go, the Late career results in Tables B and 4 are congruent, with the exception of job satisfaction, IOBSAT

In the present study, Canberra located officers in Late career are clearly less satisfied with their employment than are their counterparts serving elsewhere.

This result, provided by the Scale data, is echoed in and supported by the item results in Table 4 i.e.

	t	p
Not trained for present job	-3.32	.001
Little decision participation	2.50	.01
Dissatisfaction with Navy job	4.45	.001

In summary, Late career stage Naval officers serving in Canberra tend to report that they are less satisfied with their actual jobs, feel less trained for that job and are more frustrated at their lack of decision participation than are their counterparts serving elsewhere.

These results run counter to Jans' claims for this career stage (see Table B) although, in theoretical terms, such a result would support the loss of "Job Effort", and of "Job Performance" reported in the Jans' data on Canberra serving Late career officers (see Table B.)

Further support for the general position outlined for Canberra serving, Late career officers in Table 4 is added by responses to the K Scale of emotional commitment and to the item referring to the personal significance of Navy membership. The Scores of Canberra serving officers on these variables are low compared with those serving in Late career elsewhere.

A significant difference between Canberra and non-Canberra serving officers in Table 4 lies in the mean SQ scores. The SQ is a 10 item scale of general satisfaction with Navy life covering a range of key areas of importance in the formulation of attitudes towards the Navy. The SQ serves also as a measure of morale.

The Table 4 data show Canberra officers to be generally more dissatisfied with Navy life than those officers serving elsewhere. Their morale is lower.

CONCLUSIONS

In summary, the Table 4 results could be seen to represent those of a group of officers whose attitudes evince the onset of a more objective and more critical appreciation of the Service. Coupled with the Jans' data regarding lowered job effort and performance reported by these Late career officers (Table B) these attitudes might suggest that if any officer career crisis were to be identified, as far as the Navy is concerned, it lies more amongst Late career officers serving in Canberra rather than their Middle or Early career stage compatriots serving alongside them.

Early Career Stage

Information on this group of officers is not tabled by Jans in the above format. It is included here to complete the record for the Retention Study.

Table 5

Scale and item mean scores by
location and career stage
RAN male officers

Group 1 Early Career
(1 to 13 years service)

Scale	Canberra Mean Score	n 107	non-Canberra Mean Score	n 428	t	significance
Navy Satisfaction (SQ)	43.9		44.3		0.45	NS
Career Commitment (CS)	28.8		28.8		0.06	NS
Career Motivation (CMS)	10.7		14.4		0.44	NS
Family Factor (FF)	9.2		8.7		1.35	NS
Job Satisfaction (JOBSAT)	22.6		23.0		0.70	NS
Service Effectiveness (SE)	22.6		22.7		0.07	NS
Remuneration (RS)	14.0		14.1		0.25	NS
Emotional commitment (KS)	19.2		19.0		0.47	NS
Resignation Propensity (RP)	26.2		25.8		0.26	NS
Item						
Substantive rank	2.3		1.9		3.58	.000
Trained for present job	2.9		3.2		4.24	.000
Frustration with N.org.	2.9		2.9		0.42	NS
Decision participation	2.5		2.5		0.08	NS
Sat. with Navy job	4.7		4.9		1.17	NS
Achieving results	4.2		4.2		0.32	NS
Age	31.2		28.6		3.66	.000

COMMENT

No data from the Scales achieved statistical significance across the two populations studied.

From the items, it is evident that Early career stage officers in Canberra tend to report themselves as not being properly trained for their jobs. However this does not appear to be accompanied, as it is in Tables B and 4 by reports of jobdissatisfaction and other job-related frustrations seen amongst Canberra serving officers in other career stages.

The significance of the greater age and higher rank of these officers compared with their brethren serving elsewhere is not known.

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Technical Note 1

The first edition of N.A. Jans' "Careers in Conflict" appeared in 1985 in the form of a Defence Fellowship Report. It had a circulation limited mainly to Department of Defence libraries on the basis of one copy to each. This made availability correspondingly limited. No publishing details are to be found in this edition.

In 1988 "Careers in Conflict" was reprinted without textual alteration and issued by the Canberra College of Advanced Education under the sub-script of "Canberra Services in Administrative Studies No 10". This reprint features a cover design by Carl Ruediger. It has 403 pages not including Annexes. The National Library of Australia card number and ISBN is 0.85889-337.

A condensed version of the study entitled "Main Findings of the Services Officers' Career Study" appeared in the Australian Defence Force Journal, 65, July/August 1987.

Technical Note 2

The relevant Retention Study items are as follows:

Section 4 item 2 (SQ)

What sort of chance does the Navy give you to show what you can do?

Section 3 item 3

How frequently are you frustrated at the lack of decision making opportunities (including the signing of correspondence, signals and documents) for one of your rank level?

Technical Note 3

Two of the four JOBSAT items come from the SQ which is represented by items 1 to 10 in Section 4 of the Naval Officer Retention Survey questionnaire. These are "What sort of a chance does the Navy give you to show what you can do?" and "How do you feel about your current Navy job?" (see scale descriptions in this Note). Thus SQ, JOBSAT and the "Navy job" item share considerable variance (e.g. SQ vs JOBSAT $r \approx 0.88$, $n = 1326$). However by testing for mean scale score differences and also for mean item score difference, when the scales are constructed by selections from these items, provides a chance to assess where the main variance from the scale is concentrated for any particular analytic situation.

e.g. The JOBSAT scale failed to register any location effect but one of its constituent items ("satisfaction with Navy job") was sensitive to the location of respondents. In testing for other effects, the same "Navy job" item could well not register at all and the JOBSAT scale could.